



Curbside Recycling Pilot Program Summary

June 2004 – May 2005

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OVERVIEW OF PILOT PROGRAM

After three years of researching citizen interest in a curbside recycling service, the City of Salina launched a year-long Curbside Recycling Pilot Program in June of 2004. The participants consisted of 954 City Sanitation customers distributed throughout the City. They were not charged to have their recyclables collected during the Pilot Program in exchange for their input through two surveys distributed in July 2004 and January 2005.

A partnership was forged between the City and Images Recycling Center, a local material recovery facility, to accept the materials collected. As an agreement between the two parties, all revenue generated from the sale of recovered materials during the Pilot Program was kept by Images Recycling Center in exchange for information about incoming weights.

A curbsort recycling truck (*Figure 1*) was purchased with Solid Waste Venture money to collect materials. The eight materials types collected in the program were among the most commonly recycled household items. Additional material types were considered but they could not be added due to limited room on the truck.



Figure 1 Curbsort recycling truck

Goals of the Pilot Program

The primary goals of the Pilot Program were:

- Determine how many households could be serviced by one worker with one truck
- Determine the expenses that are involved in a curbside recycling service
- Decide how much should be charged as a monthly fee to pay for the service

SURVEY RESULTS

July 2004 Survey

The focus of the first survey was to evaluate if the program was set up to meet the participant's individual needs. About half (51%) who responded indicated that the material types collected were adequate while 47% felt it was *mostly* adequate. Those participants mainly indicated that they wish to recycle green glass and corrugated cardboard. Furthermore, 88% felt the size of the 18-gallon recycling bin provided to them was large enough at least most of the time.

This survey also gave an insight into the recycling habits of the participants. According to responses, 73% of participants had regularly taken material to Images Recycling Center in the past, meaning that 27% were new to recycling. It can further be deduced that these new recyclers represent new material being diverted from the landfill. A total of 77% of participants completed and returned the July 2004 survey.



January 2005 Survey

A mid-program survey showed that most customers say they set out their bin every week (86%) which is slightly greater than the observed setout rate (percent of customers who set out their bin on their collection day) of 78%. The average setout rate remained consistent with the lowest rates during the winter. The survey also indicated that most participants prefer weekly collection (80%) as opposed to every other week.

Participants were asked if they would be willing to pay a monthly fee of \$5.00 or less after the Pilot Program. Of those who responded, 82% indicated they would be willing to pay the fee, higher than the 64% who actually did sign up. On both surveys, 80% were very or extremely satisfied with their service. A total of 76% of participants completed and returned the January 2005 survey.

COLLECTED MATERIAL WEIGHTS

During the year-long program, a total of 208.4 tons of recyclable material was collected. The percent of material types collected compared to the overall mix remained consistent with the largest portion being newspaper / magazines (55%) and mixed paper (23%).

Monthly tonnage declined slightly during the year with an average of 17 tons of material collected each month. See the Appendix for a more detailed account of tonnage collected.

	Total Tonnage	Percent of Mix
Newspaper / magazines	113.8	55 %
Mixed paper	48.6	23 %
Plastics	15.6	7 %
Clear glass	12.8	6 %
Steel cans	7.9	4 %
Brown glass	6.4	3 %
Aluminum	3.2	2 %
Green glass	0.2	0.1 %
TOTAL	208.4	100%

Figure 2 Summary of materials collected

EVALUATION OF OPERATION

In March 2005 green glass was added to the list of materials collected based on participant feedback. An extra container was strapped to the back of the truck to hold the material. Participants also indicated a strong interest in recycling corrugated cardboard, but due to its unmanageable bulkiness, this material was not accepted. Participants were informed that cardboard could be taken to Images Recycling Center. With such a demand for corrugated cardboard, this issue should be reconsidered in the future.

Based on observations, the optimum number of households that can be serviced with one worker and one truck was set at 900. This would allow enough time for route completion, unloading at Images, and fulfillment of truck maintenance and employee tasks.

Educational materials such brochures and flyers were created to help participants understand the program and to follow its guidelines. In addition, City staff worked with Community Access TV, a local public access station, to produce two recycling educational videos that were aired frequently during the program.

The partnership with Images Recycling Center has proved to be beneficial for both parties. Not only does it save the City from the expense of building and running a material recovery facility, it also supports a local business which is vital to the wellbeing of the Salina community. This partnership is expected to continue into the future.



TRANSITION TO CITY SERVICE, JULY 2005

In March 2005 the City Commission voted to continue the Pilot Program into a full-time City Sanitation service. A letter was sent to Pilot Program participants inviting them to join the new service starting in July 2005. By the start of the service 609 of the Pilot Program participants had signed up along with 118 other customers giving a total count of 727.

Financing the Service

City staff determined that operational expenses could be funded strictly by a \$4.90 monthly fee to the 900 customers who use the service. This monthly fee will be reevaluated annually and adjusted as necessary. Capital costs, such as new recycling trucks and recycling bins, would be covered through local Solid Waste Fund Venture Grants. Along with operational and capital expenses, there is a cost savings from diverting material from the landfill and avoiding tipping fees.

<u>EXPENSES</u>	
Operational expenses	\$ 55,600
<u>REVENUES</u>	
Customer fees (\$4.90 per month)	\$ 52,920
Landfill tipping fee savings (new materials)	2,900
	\$ 55,820

Figure 3 Service expenses and revenues for 2005-2006

Although the new service began with 173 customers short of the 900 required to pay for itself, the City Commission authorized the Curbside Recycling Service to operate as a non-self supporting service for a year. At that time the future of the service will be reevaluated. Efforts are currently underway to promote the service and encourage more citizens to sign up.

CONCLUSION

After a year of experience the City now knows what to expect from the Curbside Recycling Service. By observing incoming collection weights, participant setout rates, and participant feedback, the Pilot Program was an important educational experience in the process of beginning this new City service. The main lessons learned were:

- The maximum number of households that can be serviced in Salina with one worker and one truck is 900.
- Net operational expenses for the first year will be \$55,600 which will be paid for exclusively by monthly user fees.
- The monthly user fee for this service will be \$4.90 during the first year, 2005 - 2006.

With these facts in mind, the City can now begin the Curbside Recycling Service with confidence that it has carefully researched this valuable service for Salina.



APPENDIX

